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METHOD FOR  
THE NEOGENESIS  
OF CELL AGE  
CLAIMS

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This invention newly regenerates the life age of individuals, clone bodies, organs, tissues, cells, etc. I regenerate clone bodies, organs, tissues, cells, etc., which have new cell age, from germ-line cells of individuals and clone bodies of all creatures. By this method I prevent the ageing of individuals. And I can maintain long-term excellent functions of individuals, organs, tissues, cells, etc.

By using germ-line cells in individuals and clone bodies of various creatures, I regenerate new cell age clone bodies, organs, tissues, cells, etc. By making use of somatic cells including  $2n$  germ cells, use of diploid, use of cell fusion, etc., I can freely produce undifferentiated cells. From these clone bodies generated in this way, I can regenerate repeatedly above mentioned clone bodies, organs, tissues, cells, etc., by using these somatic cells and germ cells.

I can get newly-regenerated cells with completely recovered telomeres by fertilizing  $2nXY$  clone bodies and  $2nXX$  clone bodies. In these newly-regenerated clone body groups, I can get infinite newly-regenerated cells by using fertilization together in addition to use of somatic cells including  $2n$  germ cells, use of diploid, use of cell fusion, etc. With these regenerated individuals and clone bodies of creatures, by combining fertilization, parthenogenesis, etc., I can make newly-regenerated clone body groups which have completely recovered telomeres.

I can resurrect ancient creatures to the present day, by joining crossable and fertile closely-related species to one side of

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newly-regenerated clone body groups, and as well, by creating generations such as female germ cells from crossing newly-regenerated clone bodies and preserved DNA, RNA, germ cells, etc., and by repeated processes crossing these newly regenerated generations such as female germ cells with these closely-related species, preserved DNA, RNA, germ cells, etc., which have been maintained for so long in this world. When there are creatures which can reproduce by virgin development, I resurrect these creatures artificially by parthenogenesis with physical and chemical treatments.

Somatic cells are, so to speak, the germ cells for asexual reproduction, since ontogeny is also possible from differentiated cells. Alternation of diploid and haploid phases and zygotes are the points of rejuvenation in cells. And the germ-line cells for sexual reproduction undergo alternation of nuclear phases and zygotes. These cells which are differentiated for sexual reproduction and what is called "exceptionally preserved" become haploid  $n$  state by meioses from diploid  $2n$  state. Then in fertilization both haploid  $n$  nuclei fuse to produce diploid  $2n$  undifferentiated cells, in which these germ cells disappear. In brief, slightly differentiated cells for sexual reproduction with a view to turning into undifferentiated after all are brought back to the undifferentiated state in the place of eggs.

These germ cells which once disappeared in the undifferentiated cell soon reappear as mesoderm in the gastrula stage. And at least in the fifth week of development primordial germ cells appear, which hardly ever grow old. Individuals and clone bodies in themselves preserve these  $2n$  germ-line cells, which continue maintaining telomerase activity despite repeating mitoses. Therefore, by using  $2n$  germ-line cells, I can regenerate new cell age clone bodies, organs, tissues, cells, etc., with piling up inductive

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interactions according to polarities, concentration gradients, time passage, etc.

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Including somatic cell clones, parthenogenesis, etc., there are relative relations between the differentiating state and the undifferentiated state, and both states are reversible and interconvertible each other. Cytoplasm of eggs reverses direction toward differentiation, extricates cells from the differentiated state, and induces nuclei of cells in the undifferentiated direction toward ontogeny again. It can be called resuscitation that cells getting to compose tissues and organs as a result of differentiation regain every possibility once more. This rejuvenating nature of eggs newly brings back the old age of cells walking through senility toward death, and newly recovers structures and functions of cells. That is to say, nuclei respond to messages from cytoplasm. As DNA itself is stored, DNA expressions change. Nuclear components such as DNA preserved in resuscitated cells dispatch messages. And this time components in cytoplasm respond to these messages. Nuclei as well react reciprocally, receiving messages from cytoplasm. Fibrous cytoskeletons running in all directions through cytoplasm are a series of tubes connecting plasma membranes and nuclear envelopes. These cytoskeletons operate from plasma membranes to nuclei together and begin new divisions.

Each cell that is growing old can at any time return to the undifferentiated state by rejuvenating nature of egg cytoplasm. As well, by hybridization and parthenogenesis of individuals and clone bodies, I can create newly-regenerated clone body groups which have new undifferentiated cells. These cells do not have the consciousness of oneself with which individuals are possessed. With using newly-regenerated cells produced by making the most of these many clone body groups of various levels,

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including newly-regenerated clone body groups, I can regenerate tissues, organs, individuals, etc., in the condition of young and fresh cell age. These newly-regenerated cells are the bases in preserving young and healthy individuals eternally. This invention can separate differentiation from time passage.

There are various ways of sex determination. I can use my invention practically according to these ways of sex determination. There are also hermaphrodite organisms, in which each individual has both male and female reproductive systems. These hermaphrodites fertilize themselves. This is one way to create newly-regenerated clone bodies.

By replacing old organs, such as cells, tissues, organs, etc., with newly-resuscitated healthy regenerated organs, such as cells, tissues, organs, etc., of the same gene types, I resuscitate various cells, tissues, organs, etc. By this method, I can resuscitate the whole individual. And I can continue reincarnating creatures eternally. That is to say, creatures continue resetting their life time while they are living on without death. With integrating the use of artificial materials and new energy systems together into these repeated processes, I can more and more improve the performance of cells, tissues, organs, etc. And I can create diversely evolving permanent lives with undergoing remarkable changes in themselves.